

## CURRENT LITERATURE.

### MINOR NOTICES.

A SEPARATE from the Transactions of the Wisconsin Academy of Sciences has been distributed by Dr. Davis.<sup>1</sup> In it 73 species of parasitic fungi are given that have been detected in the state since the publication of the last list in 1893, and additional hosts for 58 previously published species are recorded. *Entyloma Floerkeæ* Holw. and *E. Castaliæ* Holw. are probably described here for the first time; the latter occurs on *Nymphæa* and *Nuphar*. *Ustilago longissima macrospora* Davis is said to differ from the type in its "larger spores, 6-11  $\mu$ , mostly 8-9  $\mu$  in diameter."—J. C. A.

DR. WILLIAM TRELEASE<sup>2</sup> has published the results of his botanical observations on the Azores. The author visited those isolated islands in the summers of 1894 and 1896, and in addition to his own collections also enumerates plants previously reported from the islands. A brief discussion of the ecological features precedes the catalogue. There are few endemic species, and few pollinating insects. "The greater part of the Azorean flowering plants are either anemophilous or adapted to pollination by the aid of little-specialized insects, and, as a rule, they have open flowers with readily accessible nectar or pollen." The list includes cryptogams as well as phanerogams.—J. M. C.

IN CONTINUATION of his studies of Mexican and Central American plants, Dr. J. N. Rose<sup>3</sup> has just published an important contribution. Instead of reporting upon the many separate collections, a method which badly scatters material, Dr. Rose has determined to discuss genera, families, etc., upon the basis of all available material. In the present contribution the following subjects are presented: Notes on Celastraceæ; Notes on Rutaceæ, in which the genus *Esenbeckia* is enlarged to five species, three of which are figured; Notes on Burseraceæ; Notes on Cucurbitaceæ, among which is a discussion

<sup>1</sup> DAVIS, J. J.—Second supplementary list of parasitic fungi of Wisconsin. From Trans. Wis. Acad. Sciences 11: 165-178. 1897.

<sup>2</sup> TRELEASE, WILLIAM.—Botanical observations on the Azores. From the eighth Annual Report of the Missouri Botanical Garden, pp. 77-220, pl. 12-66, September 9, 1897.

<sup>3</sup> ROSE, J. N.—Studies of Mexican and Central American plants. Contrib. U. S. Nat. Herb. 5: 109-144. 1897.



of the genus *Echinopepon* and its allies, a number of new species being described and figured; A synopsis of the species of *Heliocarpus*, containing fifteen species; A synopsis of the American species of *Hermannia*; A synopsis of *Drymaria nodosa* and its allies; and Descriptions of miscellaneous new species, thirty-five in number, and with numerous illustrations.—J. M. C.

MR. CHAS. RICHARDS DODGE<sup>4</sup> has published the results of his long investigations among useful fibers. It is an enumeration of 1018 species of useful fiber plants, the more important of which are fully described and treated from the botanical, agricultural, and industrial standpoints. It is much more than a list of commercial species, for it is especially interesting in its presentation of the native fibers. The aboriginal American fibers have never before been brought together in such a complete way. The contribution is a great compendium of useful knowledge, to secure which Mr. Dodge has enjoyed special facilities. He is to be thanked for a very valuable contribution to the literature of economic botany.—J. M. C.

#### NOTES FOR STUDENTS.

A NEW AUXANOMETER is described by L. C. Corbett in the ninth annual report of the West Virginia Experiment Station for 1896. It is a lever instrument recording by pen upon a slowly revolving drum. The plant is attached to the short arm of the lever by platinum wire.

Other topics treated by the same writer are the greater vigor of northern grown seeds, bulbs, and cuttings, demonstrated by a large number of experiments; the behavior of cuttings, especially from tuber producing plants; and the injuries due to forest fires.

In the same report A. D. Hopkins discusses the life zones of West Virginia and the distribution of trees. The Canadian, transition, and upper austral zones can be traced, although the three marked areas of spruce, pine, and hard wood forests do not coincide with them. Three maps accompany the paper.—J. C. A.

RECENT BULLETINS from the experiment stations contain botanical matter of interest as follows: A. S. Hitchcock (Kas. no. 66, pp. 19-54) presents the fourth bulletin in a series on Kansas weeds, assisted by George L. Clothier. It is devoted to the fruits and seeds, including a description and illustration of each of the 209 species embraced in the list. The plates are

<sup>4</sup>DODGE, CHARLES RICHARDS.—A descriptive catalogue of useful fiber plants of the world, including the structural and economic classification of fibers. Report no. 9, U. S. Department of Agriculture. Fiber investigations. Pp. 361. Pl. 1-12. 1897.